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Pat.OPI HEI 01-26659  
(W1200-00033)

JAPANESE PATENT OFFICE

OPI PATENT OFFICIAL GAZETTE

Patent OPI No. HEI 01-25659 (SHO 64-25659)

Date of OPI: January 27, 1989

Patent Application No. SHO 62-182638

Date of Filing: July 22, 1987

Inventors: Seiichi Terauchi and Hiroshi Murata

Applicant: Fujitsu K.K.

Title of Invention: Terminal for In-Home Betting System

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SPECIFICATION

1. TITLE OF INVENTION: Terminal for In-Home Betting System

2. CLAIMS:

1. A terminal for an in-home betting system comprising: a television receiver (1) having a teletext unit, and a computer system (2); or alternatively, a television receiver (1'), and a computer system (2') having a teletext adapter;

said terminal for the in-home betting system further comprising:

20 means for converting a teletext digital signal provided from the teletext unit in said television receiver (1) or said computer system (2'), then inputting the result to said computer system (2 or 2'), and thereby displaying the result of editing and processing; and

means (5) for inputting bet information from a keyboard (KB) (25) of said computer system (2 or 2') into a telephone betting system (3) in accordance with instructions from said computer system (2 or 2').

2. The terminal for the in-home betting system according to Claim 1, wherein said computer system (2 or 2') of said terminal for the in-home betting system comprises means for inputting bet information from a betting IC card.

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3. DETAILED DESCRIPTION OF THE INVENTION

[Summary]

The present invention relates to an in-home betting system terminal in an in-home betting system.

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An object of the present invention is to reduce the congestion for processing of bets from a telephone betting system occurring in a ticket issuing system center, thereby to realize low cost telephone betting without enhancing the center function.

10 A terminal for an in-home betting system comprises: a television receiver having a teletext unit, and a computer system; or alternatively, a television receiver, and a computer system having a teletext adapter. The terminal for the in-home betting system further comprises: means for converting a teletext digital signal provided from the teletext unit in said television receiver or said computer system, then inputting the result to said computer system, and thereby displaying the result of editing and processing; and means for inputting bet information from a keyboard (KB) of said computer system into a telephone betting system in accordance with instructions from said computer system.

## [Field of Industrial Application]

The present invention relates to an in-home betting system terminal in an in-home betting system.

20 In a totalizator system such as a recent bet ticket issuing system, the methods of purchasing a bet ticket include: a cash betting system in which a bet ticket such as a horse race ticket is purchased at a ticket booth at track or off track; and a telephone betting system under membership system.

In the (prior art) telephone betting system, a customer collects the information on horse races, bicycle races and the like from the newspaper, television, radio and the like. Then, on the basis of his own analysis, he bets on the race using a telephone set in accordance with a predetermined keying procedure.

30 In such a telephone betting system, a telephone set of poor intelligence is used as the means for betting. That is, the telephone does not provide efficient means for storing and processing the collected information. For example, in case of inquiry by telephone at a headquarters center of the bet ticket issuing system, because of limited data base construction in the system of the center, provided information is presently limited only to race track condition, weather condition, entry cancellation information and the like. This rather poor information service provided for customers to bet the race has been a problem.

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On the other hand, using another system, such as CAPTAIN system, a videotex system, and a teletext system, currently in an early stage of utilization, latest information on horse races, bicycle races, and the like can be obtained quickly and accurately at any time.

These methods of obtaining information on horse races, bicycle races, and the like are classified into two categories. The first category is the down-load method in which the promoter of race sends out information in one way, whereby customers down-load the sent-out information. The second category is the interactive communications method in which mutual information exchange is carried out between the promoter and each customer.

10 In the down-load method using especially a cable network such as a value added network (VAN) and personal-computer communications, when the number of data addressees (or members) grows to a few hundred thousands in future, the heavy traffic requires large facilities in the center, thereby causing a huge cost of facilities and operation. Further, collection of the access charges is a problem to be resolved.

However, even in the down-load method, a wireless teletext scheme in which the sender sends out information in one way in a free-running manner avoids the problems concerning access charges and line usage charges, thereby  
20 economically permitting the use of information on horse races, bicycle races and the like.

Further, when this information is stored in a personal computer capable of processing the data, the information can be processed into the most efficient form for betting, and then be displayed. This substantially reduces the load on the center system of the race promoter.

[Prior Art and Problems to be Solved by the Invention]

Figure 3 is a diagram showing an exemplary configuration of a prior art telephone betting system.

30 As described above, in a recent totalizator system, the methods of purchasing a bet ticket include: a cash betting system in which a bet ticket is purchased at a ticket booth at track or off track; and a telephone betting system under membership system.

As for the cash betting system, the possibility of increasing the number of

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betting booths at track is not expected much. Further, construction of betting booths off track is difficult in many cases because of collective actions by residents or arguments from local shopping malls.

10 In a telephone betting system 3 shown in the figure, the number of facilities and the number of subscribers have grown steady year by year. Nevertheless, since a telephone set is used as the terminal for performing the interactive cable communications, it is necessary to limit the number of subscribers 7 for each telephone betting system 3 in order to avoid the congestion in the data processing in a headquarters center 4 and hence to avoid the degradation in customer service. This requires large facilities in the center, thereby causing the problems of large facilities and a high operation cost.

In order to resolve such problems in the prior art, an object of the present invention is to provide a terminal for an in-home betting system to be used in an in-home betting system in which a customer can expect the result of a horse race, bicycle race and the like, thereby betting on the expectation efficiently, at home.

**[Means for Solving the Problem]**

20 Figure 1 is a diagram showing the principles of a terminal for an in-home betting system in according with the invention.

The above-mentioned problems are resolved by:

(1) A terminal for an in-home betting system comprising: a television receiver 1 having a teletext unit, and a computer system 2; or alternatively, a television receiver 1', and a computer system 2' having a teletext adapter;

the terminal for the in-home betting system comprising:

means for converting a teletext digital signal provided from the teletext unit in said television receiver 1 or said computer system 2', then inputting the result to said computer system 2 or 2', and thereby displaying the result of editing and processing; and

30 means ⑤ for inputting bet information from a keyboard (KB) 25 of said computer system 2 or 2' into a telephone betting system 3 in accordance with instructions from said computer system 2 or 2'.

(2) Said terminal for the in-home betting system, wherein said computer system 2 or 2' of said terminal for the in-home betting system comprises means

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for inputting bet information from a betting IC card.

### [Operation of the Invention]

According to the invention,

information, on a horse race, a bicycle race and the like, generated in the information center system of a promoter of a race (horse race, bicycle race and the like) is transmitted as down-load information to a broadcast station, whereby the information is broadcasted in teletext by the broadcast station.

The teletext signal is received by and stored in the terminal for the in-  
10 ~~home betting system in accordance with the invention comprising a television~~  
~~receiver and a computer system such as personal computer.~~ On the basis of the  
information, for example, forecast software in the personal computer predicts  
the result of the race, whereby on the basis of the prediction, a user places a bet  
from the personal computer using a telephone via a public telephone line in  
accordance with a procedure instructed by the personal computer. Accordingly,  
the information on the horse race, bicycle race and the like is economically  
obtained by down-load operation. Further, since the public telephone line is  
used for data transfer, congestion in the center is reduced in comparison with  
20 the case of interactive cable communications according to the prior art, and  
hence the upper limit in the number of subscribers in each telephone betting  
system is raised. Furthermore, the data processing capability of the personal  
computer permits the arbitrary processing and editing of the information,  
thereby giving information for efficient determination of the race to bet.

### [Embodiments of the Invention]

The embodiments of the invention are described below in detail with reference to the drawings.

The above-mentioned Figure 1 is a diagram showing the principles of a  
terminal for an in-home betting system in accordance with to the invention.  
30 Figure 2 is a block diagram showing an embodiment of the invention. The  
invention comprises: means for converting the digital information of teletext  
and thereby inputting the result to a personal computer 2; and means for  
placing a bet onto a telephone betting system 3 on the basis of the instruction  
from the personal computer 2. Like numerals herein designate the like

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elements throughout the figures.

The configuration and the operation of the terminal for the in-home betting system in accordance with the invention are described below with reference to Figures 1 and 2.

As shown in the principle diagram of Figure 1, the in-home betting system in accordance with the invention comprises: a broadcast station for teletext broadcasting; a terminal for an in-home betting system composed of a television receiver 1 and a personal computer 2; and a promoter system composed of a telephone betting system 3, a headquarters center 4, and an information center system 5. The main part of the invention is the terminal for the in-home betting system composed of television receiver 1 and personal computer 2.

The operation of the in-home betting system is as follows (see Figure 1).

① The information center system 5 transmits down-load information on a horse race, a bicycle race and the like, to the teletext broadcast station. Here, the information center system 5 receives the information on the horse race, the bicycle race and the like in the form of race achievements, odds and the like, from the headquarters center 4 of the telephone betting system.

② The broadcast station transmits the information in teletext.

③ and ④ The television receiver 1 provided in the terminal for the in-home betting system according to the invention receives the teletext broadcast signal. Received data (digital signal) is converted into a digital signal for personal computer. According to the data processing capability of the personal computer 2, the data is processed and edited into information convenient for determination of the race to bet (for example, the winning and losing horses are predicted by a forecast system). The result is displayed on the display screen of the displaying section.

⑤ A customer selects menu interactively with personal computer 2, thereby placing a bet onto telephone betting system 3 via a public telephone line 6 according to the same procedure as that of telephone betting.

Figure 2 is a block diagram showing an embodiment of the terminal for the in-home betting system.

In the present embodiment, the terminal comprises a television receiver 1, a teletext adapter 11, and a personal computer 2. The digital output (raster data; a teletext 21P interface (Japanese Industrial Standards)) of the teletext

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adapter 11 is converted into an RS-232C interface signal by a converter 12, and then is stored through an I/O adapter (ADP) 22 of a known type (for example, RS-232C adapter used for personal computer communications), through the data bus of the personal computer 2, and into main storage (MS) 21.

A central processing unit (CPU) 20 of the personal computer 2 performs a specific program, and thereby processes and edits the data, and further stores the result into main storage (MS) 21.

The customer interactively searches the processed data, and obtains necessary information on the screen of a displaying section 23. Then, the

10 ~~customer activates an communication adapter section 24, thereby transferring bet information from a keyboard (KB) 25, through the telephone network 6, and to the telephone betting system 3 in accordance with the predetermined procedure.~~

The bet may be carried out by an IC card control section 26 using an IC card containing the information on the purchase of bet ticket, when necessary.

In particular, when the terminal for the in-home betting system is located not at home but at track or off track, and when the telephone betting is carried out in the same procedure as that of in-home betting, the IC card allows so-called cashless betting.

20 In this case, the IC card also facilitates the management of the entry/ exit of the customer.

The above-mentioned embodiment has been described for the case in which television receiver 1 is provided with teletext adapter 11P. However, as shown in the principle diagram of Figure 1, the teletext adapter may be provided within the personal computer.

30 As such, the invention has been devised on the basis of the facts that the teletext broadcast provides down-load information sent out in one way in a free-running manner and that a recent small computer system such as a personal computer has sufficient data processing capability. Further, the invention is characterized in that the information provided by a promoter of race is received through teletext by a personal computer at home and the like; that, according to the data processing capability of the personal computer, the data is processed and edited for the purpose of win/lose prediction of the race and the like; and that the telephone betting is carried out from the keyboard (KB)

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interactively with the personal computer according to the predetermined procedure.

### [Effects of the Invention]

As described above in detail, in the in-home betting system with the terminal, the information on a horse race, a bicycle race and the like generated in the information center system of a promoter of a race (horse race, bicycle race and the like) is transmitted as down-load information to a broadcast station, whereby the information is broadcasted in teletext by the broadcast station.

10 The teletext is received by and stored in the terminal for the in-home betting system according to the invention comprising the television receiver and the computer system such as a personal computer. On the basis of the information, for example, forecast software in the personal computer predicts the result of the race, whereby on the basis of the prediction, a user places a bet from the personal computer using the telephone via the public telephone line in accordance with the procedure instructed by the personal computer. Accordingly, the information on the horse race, bicycle race and the like is economically obtained by down-load operation. Further, since the line used for data transfer is the public telephone line, congestion in the center is reduced in  
20 comparison with the case of interactive cable communications according to the prior art, and hence the upper limit in the number of subscribers in each telephone betting system is raised. Furthermore, the data processing capability of the personal computer allows the arbitrary processing and editing of the information, thereby giving information for efficient determination of the race to bet.

### 4. BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a diagram showing the principles of a terminal for an in-home betting system in accordance with the invention.

30 Figure 2 is a block diagram showing an embodiment of the invention.

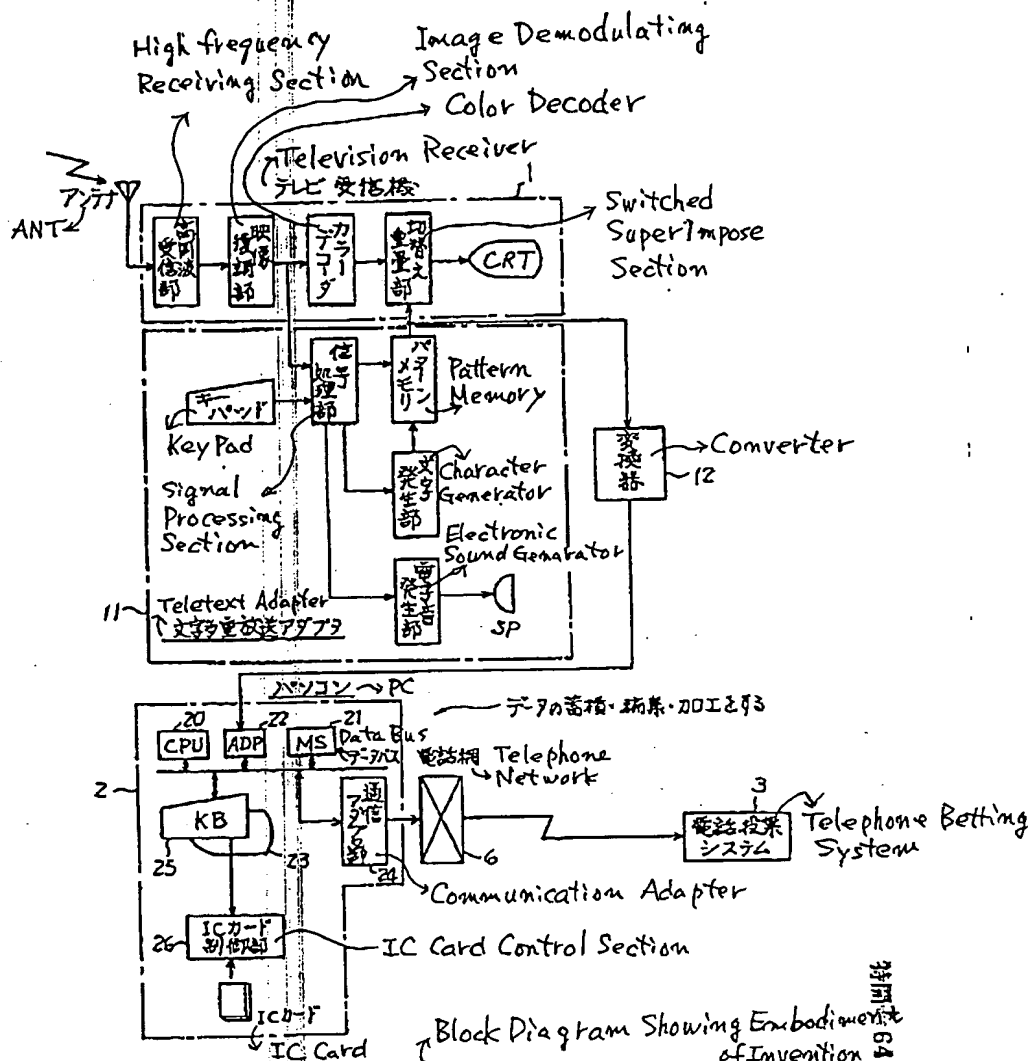
Figure 3 is a diagram showing an exemplary configuration of a prior art telephone betting system.

In the figures,  
numerals 1 and 1' indicate television receivers,

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2 and 2' indicate personal computers,  
20 indicates a central processing unit (CPU),  
21 indicates main storage (MS) ,  
22 indicates input/output adapter (ADP),  
23 indicates a display section,  
24 indicates an communication adapter section 24,  
25 indicates a key board (KB),  
26 indicates an IC card control section ,  
3 indicates a telephone betting system,  
10 4 indicates a headquarters center,  
5 indicates an information center system,  
6 indicates a telephone network or a public telephone line, and  
7 indicates a subscriber.

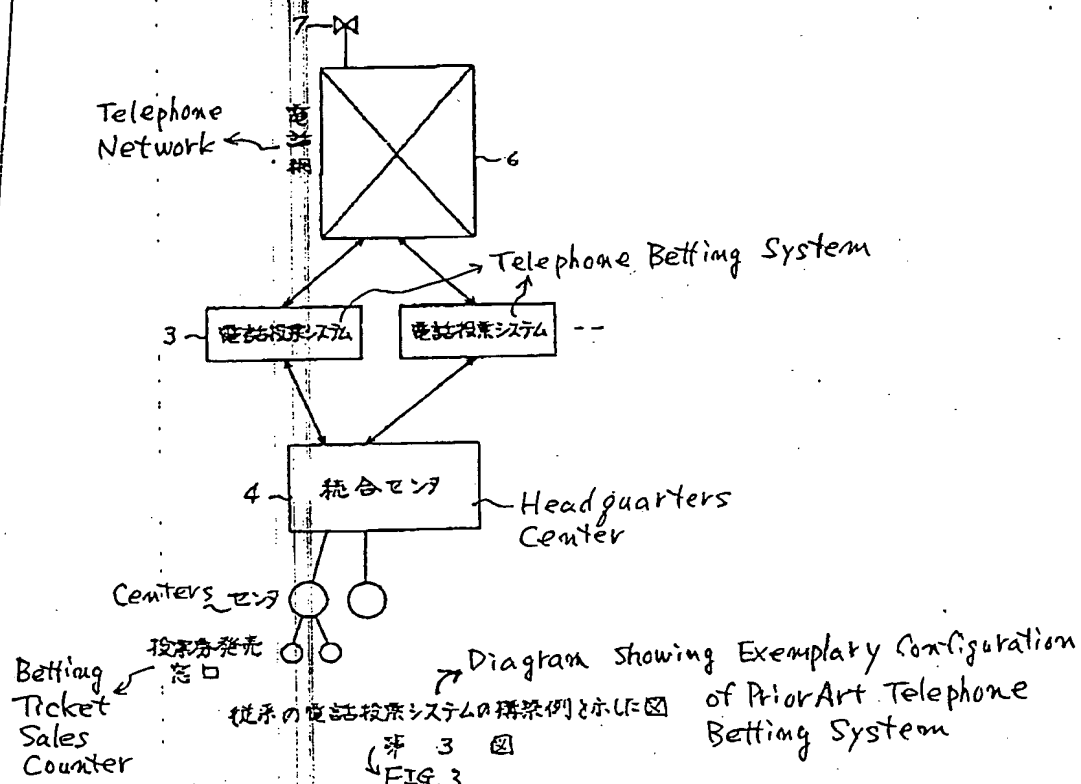




Block Diagram Showing Embodiment of Invention

FIG. 2

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